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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,925	09/10/2003	Basil Karanikos		3129
7590	09/21/2006			
Wolf Greenfield 600 Atlantic Avenue Boston, MA 02110			EXAMINER DRODGE, JOSEPH W	
			ART UNIT	PAPER NUMBER
			1723	
DATE MAILED: 09/21/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/658,925

Applicant(s)

KARANIKOS ET AL.

Examiner

Joseph W. Drodge

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

This Office Action is in response to the Amendment filed on July 13, 2006.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4,7,12-14,17,22-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvan et al patent 5,325,765 (Sylvan) in view of newly cited WO patent 91/14389 to Frise (Frise).

Regarding independent claims 1,12 and 44, Sylvan discloses a coffee filter including a filter cartridge comprising container with bottom and side walls in portion 64 extending upwards to a closing cover 62 having top opening 72 (column 4, lines 16-27). The cartridge houses filter element 16 with bottom 56 and sloping side walls 50 and 52 (column 3, lines 54-60), the filter element being ***joined directly at a peripheral junction 24 with the adjacent interior wall surface of the cartridge housing (see column 3, lines 48-62 and figure 4).*** The filter element is of synthetic fibers such as of polypropylene. The interior of the filter cartridge is thus divided into a first chamber housing beverage 22 and second chamber 42 receiving outflow from the filter (column 3, line 66-column 4, line 3).

The claims all differ in requiring the filter element to be pleated or corrugated. However, Frise teaches a coffee filter element that is reusable, is of fibrous material such as polypropylene (or other materials similar to those employed by Sylvan) and has side walls which are fluted or pleated (see Translated Abstract, and page 2). It would have been obvious to one of ordinary skill in the art to have modified the coffee filter device of Sylvan by utilizing a pleated filter, as taught by Frise, to increase the filter surface area.

Regarding various dependent claims, Sylvan also discloses features of the filter side wall, Sylvan also discloses features of container and side wall being parallel, height of filter side wall being between 50 and 100% of height of filter cartridge, cartridge and cover having impermeable walls and being frustoconical, upper rim 18 of the cartridge and top and bottom piercing means (70 and 74); all generally clearly illustrated in the figures.

Regarding claims 3,4,32 and 33, Frise teaches the filter side wall having pleats or flutes which function as filtrate exit channels (page 2); flutes are considered a form of pleats or corrugations.

2. Claims 3,5,6,9-11,15-16,19-21 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvan et al patent 5,325,765 in view of newly cited WO patent 91/14389 to Frise (Frise), as applied to claims 1 and 12 and further in view of Daswick, U.S. 3,971,305.

Regarding Claims 5,6,15 and 16, Daswick discloses or suggests that the filter extends downward and away from the container at an angle of less than about 1 degree (Col. 4, Lines 1-4). It would have been obvious to one of ordinary skill in the art to modify Lesser in view of Tanner with the element of Daswick in order to provide portions spaced outwardly from the filter to allow flow freely outside the filter (Col. 4, Lines 1-5).

Regarding Claims 9-11 and 19-21, Lesser in view of Tanner does not disclose lower permeability and increased thickness in the lower region of the filter element. Daswick teaches a beverage filter cartridge wherein reduced permeability is achieved by increasing the thickness by lining the lower region of the filter element with an insert (Fig. 2, #28) of like filter material. It would have been obvious to one of ordinary skill in the art to modify Lesser in view of Tanner with the element of Daswick in order to retain the beverage media within the filter (Col. 3, Lines 11-15).

3. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvan et al patent 5,325,765 in view of newly cited WO patent 91/14389 to Frise (Frise), as applied to claims 1 and 12 and), and further in view of Michielsen, U.S. Patent No. 3,389,650.

Regarding Claims 8 and 18, Lesser in view of Tanner does not disclose channels increasing in width. Michielsen teaches a beverage filter cartridge comprising exit channels that increase in width to a maximum adjacent the filter bottom. (Fig. 1, #2). It would have been obvious to one of ordinary skill in the art to modify Lesser in view of Tanner with the element of Michielsen because it is a corrugated structure common in the filter art.

***Response to Arguments***


4. Applicant's arguments with respect to Claims 1-44 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph W. Drodge whose telephone number is 571-272-1140. The examiner can normally be reached on 8:30-5:00 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOSEPH DRODGE  
PRIMARY EXAMINER

JWD  
September 12, 2006

JOSEPH DRODGE  
PRIMARY EXAMINER